

ABSTRACT

A remotely controllable robotic apparatus for the maneuvering of flexible catheters in the human cardiovascular system comprises means in the form of an arm (2) for the positioning, aiming and correct orientation with respect to the patient's body of a device (R) which supports at least one portion of the catheter (C) and which comprises remotely controllable actuators for transmitting to the said catheter at least a longitudinal movement of advance or withdrawal and/or a rightward or leftward rotary movement about its longitudinal axis, these actuators consisting of sets of opposing wheels or rollers parallel to each other, or equivalent means such as belts, connected to remotely controllable rotation means and positioned in such a way as to transmit the aforesaid movements to the catheter. The apparatus comprises a pair of rollers (W1, W2) parallel to each other and orthogonal to the catheter, connected wholly or partially to means of rotation (Z1) in both directions, to produce the longitudinal advance or withdrawal (Z10) of the said catheter, and connected to means for transmitting an axial movement (Z2) in one direction or in the opposite direction to at least one of the said rollers, in such a way as to cause the rotation (Z20) by rolling of the said catheter between the rollers, so that the catheter rotates about its own axis either to the right or to the left.